

WHAT IS CLAIMED IS:

1. A multiple card enclosure comprising:
 - a mother card cage having a mother card enclosed therein;
 - a daughter card removably positioned within said cage for connecting said daughter card with the mother card, said daughter card having a power tab extending from a first edge defining said daughter card and a signal connector extending from a second edge perpendicular to said first edge, said signal connector configured to connect to said mother card for signal interconnection therebetween; and
 - a guide means for guiding said daughter card into said mother card cage and in signal interconnection therewith, said guide means configured to provide power into and out of said daughter card via connection with said power tab.
2. The enclosure of claim 1, wherein said guide means includes a receptacle integrated therewith, said receptacle aligned with said power tab and provides power to said power tab when said signal connector is operably connected to said mother card.
3. The enclosure of claim 2, wherein said guide means are disposed within said cage on at least one of one side and opposite sides of said daughter card having at least one corresponding power tab extending therefrom.

4. A multiple card enclosure comprising:

a mother card cage having a mother card enclosed therein;

a daughter card removably positioned within said cage for connecting said daughter card with the mother card, said daughter card having a power tab extending from a first edge defining said daughter card and a signal connector extending from a second edge perpendicular to said first edge, said signal connector configured to connect to said mother card for signal interconnection therebetween; and

at least one guide rail connecting said daughter card to said enclosure, said daughter card being slidably disposed on said rail, and being guidable into said cage using said rail; said at least one guide rail affixed to said cage, said power tab extending from said daughter card being slidably received by said guide rail to allow said daughter card to be slid into and out of said cage, said guide rail having a power receptacle disposed within said rail, said receptacle configured to operably provide power interconnection between said tab and a power supply when said daughter card is plugged into said cage;

wherein said guide rail aligns said tab relative to said receptacle for power interconnection therebetween, and guides said signal connector to the mother card for signal interconnection therebetween by guiding said tab within said rail when said daughter card is slid into said cage.

5. The enclosure of claim 4, wherein said at least one guide rail includes two guide rails, each being disposed within said cage and on opposite sides of said daughter card having at least one corresponding tab extending therefrom.

6. The enclosure of claim 4, wherein said power tab is operably connected to said power supply via at least one of an electrical bus and a conductive wire connected therebetween.

7. The enclosure of claim 4, wherein said power tab includes a plurality of power tabs aligned to electrically interconnect with a corresponding receptacle extending within said at least one rail.

8. The enclosure of claim 7, wherein each tab of said plurality of power tabs operably receives a unique voltage via a corresponding bus or wire connected to a respective receptacle disposed with said at least one rail.

9. The enclosure of claim 4, wherein said power tab is operably connected to a bus bar extending across said daughter card, said bus bar configured to provide electrical power to electrical components disposed on said daughter card.

10. The enclosure of claim 8, wherein said receptacle includes a power connection fork configured to receive two sides defining said tab and electrically coupled to said corresponding bus.

11. The enclosure of claim 10, wherein said power connection fork is a power louver electrically coupled to said corresponding bus.

12. The enclosure of claim 8, wherein said corresponding bus includes a plurality of stacked busses insulated from one another via an insulative layer.

13. The enclosure of claim 7, wherein said plurality of power tabs extend from a middle portion of said daughter card from at least one of a top and a bottom of said daughter card, said plurality of tabs extending from a middle portion of said daughter card provide a float range for proper alignment of said signal connector to said mother card.

14. The enclosure of claim 4, wherein said daughter card includes a reworkable EMC tailstock opposite said signal connector.

15. A central electronics complex of a computer system, comprising:

- a cage configured to be received in a rack;
- a power supply disposed in said cage, said power supply configured to provide electrical power therein;
- a backplane disposed in said cage, said backplane including a mother card having at least one card slot on a surface thereof;
- a plurality of daughter cards removably positioned within said cage, each daughter card configured to connect with a corresponding card slot in said mother card, said each daughter card having a power tab extending from a first edge defining said each daughter card and a signal connector extending from a second edge perpendicular to said first edge, said signal connector configured to connect to said mother card for signal interconnection therebetween;
- and
- at least one guide rail connecting said each daughter card to said cage, said each daughter card being slidably disposed on said rail, and being guidable into said cage using said rail; said at least one guide rail affixed to said cage, said power tab extending from said each card being slidably received by said guide rail to allow said each daughter card to be slid into and out of said cage, said guide rail having a power receptacle disposed within said rail, said receptacle configured to operably provide power interconnection between said tab and said power supply when said each daughter card is plugged into said cage;
- wherein said guide rail aligns said tab relative to said receptacle for power interconnection therebetween, and guides said signal connector to the slot of the mother card for signal interconnection therebetween by guiding said tab within said rail when said daughter card is slid into said cage.

16. The central electronics complex of claim 15, wherein said at least one guide rail includes two guide rails, each being disposed within said cage and on opposite sides of said daughter card having at least one corresponding tab extending therefrom.

17. The central electronics complex of claim 15, wherein said power tab is operably connected to said power supply via at least one of an electrical bus and a conductive wire connected therebetween.

18. The central electronics complex of claim 15, wherein said power tab includes a plurality of power tabs aligned to electrically interconnect with a corresponding receptacle extending within said at least one rail.

19. The central electronics complex of claim 18, wherein each tab of said plurality of power tabs operably receives a unique voltage via at least one of a corresponding bus and a conductive wire connected to a respective receptacle disposed with said at least one rail.

20. The central electronics complex of claim 15, wherein said power tab is operably connected to a bus bar extending across said daughter card, said bus bar configured to provide electrical power to electrical components disposed on said daughter card.

21. The central electronics complex of claim 19, wherein said receptacle includes a power connection fork configured to receive two sides defining said tab and electrically coupled to said power supply.

22. The central electronics complex of claim 21, wherein said power connection fork is a power louver electrically coupled to said power supply.

23. The central electronics complex of claim 19, wherein said corresponding bus includes a plurality of stacked busses insulated from one another via an insulative layer.

24. The central electronics complex of claim 18, wherein said plurality of power tabs extend from a middle portion of said daughter card from at least one of a top and a bottom of said daughter card, said plurality of tabs extending from a middle portion of said daughter card provide a float range for proper alignment of said signal connector to said mother card.

25. The central electronics complex of claim 15, wherein said daughter card includes a reworkable EMC tailstock opposite said signal connector.